

## REVISIONS TO CLAIMS

1 1. (original) An apparatus having a control circuit which comprises a feedforward filter  
2 arrangement (1) and a controller (3), characterized in that an adaptation of the parameters ( $P_{ff}$ ) of  
3 the feedforward filter arrangement (1) and the parameters ( $P_c$ ) of the controller (3) is effected  
4 during operation of the apparatus.

1 2. (original) An apparatus as claimed in claim 1, characterized in that for the adaptation an  
2 adaptation algorithm is executed on a microprocessor (4), particularly a digital signal processor  
3 (4).

1 3. (original) An apparatus as claimed in claim 1 or 2, characterized in that said apparatus  
2 includes a disk drive (5) for storage disk media, in which vibrations and internal disturbances  
3 which occur during operation of the apparatus are compensated by an adaptation of the  
4 parameters ( $P_{ff}$ ) of the feedforward filter arrangement (1) and the parameters ( $P_c$ ) of the  
5 controller (3).

1 4. (new) A method for responding to effects on precision of positioning of a scanning element in  
2 a disk drive, the method comprising:  
3 • sensing forces acting the disk drive;  
4 • converting detected forces into disturbance signals;  
5 • applying the disturbance signals to a feed forward filter to obtain a disturbance variable;  
6 • applying the disturbance variable to a controller;  
7 • adjusting the disk drive for errors using the controller;

## REVISIONS TO CLAIMS

- receiving reference variables, error signals, and control variables at a processor;
- providing outputs from the processor to alter parameters of the feed forward filter and the controller.

AR  
(NEW)

5. The apparatus of claim 1, wherein the controller comprises

- an error signal input, for receiving error signals responsive to operation of a controlled device;
- an input for receiving adapted control parameters, relative to variations in type of external disturbances of the controlled device; and
- a control variable output for supplying signals for controlling the controlled device responsive to both the error signal and the adapted control parameters.